

WHAT IS CLAIMED IS:

1. An apparatus for controlling a trip point associated with a circuit;
comprising:
 - a counter configured to receive a clock burst and output a count signal corresponding to a desired trip point;
 - a DAC configured to receive the count signal, and in response, output a trip point signal;
 - a temperature sensor configured to output a temperature signal; and
 - a comparator coupled to the DAC and temperature sensor and configured to determine when the desired trip point is tripped.
2. The apparatus of Claim 1, wherein the clock burst provides about 256 trip points.
3. The apparatus of Claim 1, wherein the clock burst further comprises pulses.
4. The apparatus of Claim 3, wherein each of the pulses corresponds to a temperature.
5. The apparatus of Claim 3, wherein the counter is configured to count the pulses associated with the clock burst.
6. The apparatus of Claim 5, wherein the desired trip point is set by adding the counted pulses to a predetermined temperature.
7. The apparatus of Claim 1, wherein the counter further comprises a clear input configured to receive a signal to clear the counter.

8. The apparatus of Claim 7, wherein the desired trip point is under active control allowing different trip points to be set at various times during operation of the circuit.

9. The apparatus of Claim 7, wherein the desired trip point is set at power up of the circuit.

10. The apparatus of Claim 1, wherein the trip point signal is a current relating to the count.

11. A method for controlling a trip point associated with a circuit; comprising:

- clearing a counter;
- applying a clock burst;
- setting the trip point based on the clock burst;
- monitoring a temperature associated with the circuit; and
- determining when the trip point is tripped.

12. The method of Claim 11, further comprising performing a predetermined action when the trip point is tripped.

13. The method of Claim 12, wherein the predetermined action may include at least one of the following: shutting down the circuit; changing the power mode of the circuit; and adjusting a fan.

14. The method of Claim 11, wherein applying the clock burst is performed at power-up of the circuit.

15. The method of Claim 11, wherein applying the clock burst is performed during operation of the circuit.

16. The method of Claim 11, wherein setting the trip point based on the clock burst further comprises counting a number of pulses within the clock burst.

17. The method of Claim 16, wherein setting the trip point based on the clock burst further comprises driving a DAC to generate a current in response to the counted number of pulses.

18. The method of Claim 11, further comprising testing a response of the circuit to an over temperature condition when the circuit is at a temperature below the over temperature condition.

19. An apparatus for controlling a trip point associated with a circuit; comprising:

means for clearing a counter;

means for applying a clock burst;

means for setting the trip point based on the clock burst;

means for monitoring a temperature associated with the circuit; and

means for determining when the trip point is tripped.

20. The apparatus of Claim 19, further comprising means for performing a predetermined action when the trip point is tripped.

21. The apparatus of Claim 19, wherein the means for applying the clock burst further comprises means for applying the clock burst during operation of the circuit.